MODULE HANDBOOK

<table>
<tr><td>Module Name</td><td>Mechanism of Inorganic Reaction</td></tr>
<tr><td>Module Level</td><td>Bachelor</td></tr>
<tr><td>Abbreviation, if applicable</td><td>3074212056</td></tr>
<tr><td>Sub-heading, if applicable</td><td>-</td></tr>
<tr><td>Course included in the module, if applicable</td><td>-</td></tr>
<tr><td>Semester/term</td><td>7th/ fourth year</td></tr>
<tr><td>Module coordinator(s)</td><td>Dr. Amaria, M.Si.</td></tr>
<tr><td>Lecturer(s)</td><td>Prof. Dr. Sari Edi C., M.Si. ; Dr. Amaria, M.Si. ; Dina Kartika M., S.Si., M.Sc.</td></tr>
<tr><td>Language</td><td>Bahasa Indonesia</td></tr>
<tr><td>Classification withinthe curriculum</td><td>Compulsory</td></tr>
<tr><td>Teaching format/class hours per week duringthe semester</td><td>2 hours lectures (50 min / hour)</td></tr>
<tr><td>Workload</td><td>2 x 50 minutes lectures, 2 x 60 minutes structured activity,
2 x 60 minutes individual activity, 14 weeks per semester,
79,33 total hours per semester ~ 3.18 ECTS**</td></tr>
<tr><td>Credit point</td><td>2 CU x 1.59 = 3.18 ECTS</td></tr>
<tr><td>Requirement</td><td>Basic chemistry I, II, Inorganic Chemistry I (Basic Theory of Inorganic) and Coordination Chemistry</td></tr>
<tr><td>Target Learning Outcomes</td><td>PLO 1
Mastering the concepts of structure, dynamics and energy, as well as the basic principles of separation, analysis, synthesis and characterization of micromolecular compounds and their applications.
PLO 5
Able to apply logical, critical, systematic and innovative thinking in the context of developing or applying science and technology by paying attention to and applying humanities values according to the field of chemistry in problem solving.</td></tr>
<tr><td>Content</td><td>Studies on thermodynamic stability, stereochemistry of complex compounds, mechanism and kinetics of substitution reactions of octahedral and square complexes in a group collaboration forum with discussion activities</td></tr>
<tr><td>Study/exam achievements</td><td>Students are considered to complete the course and pass if they obtain at least 40% of maximum final grade. The final grade (NA) is calculated based on the following ratio:
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<tr><td>Assessment Components</td><td>Percentage of contribution</td></tr>
<tr><td>Participation</td><td>20%</td></tr>
<tr><td>Assignment</td><td>30%</td></tr>
<tr><td>Mid-semester test</td><td>20%</td></tr>
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	Final semester test: 30%
Media:	Computer, LCD, White board, Presentation, and Books.
Learning Methods	Individual assignment, group assignment, discussion, and presentation
Literature:	1. Basolo, F. and Pearson R.G. 1973. Mechanisms of Inorganic Reactions., Wiley Eastern Private LTD. New Delhi. 2. Benson, D., 1968. Mechanisms of Inorganic Reactions in Solution, McGraw-Hill, London. 3. Douglas, B.E. ; McDaniel, D. H. ; Alexander, J.J., 1994. Concepts and Models of Inorganic Chemistry, Third Edition, John Wiley & Sons, Inc. New York. 4. Huheey, J.E. ; Keiter, E.A. ; Keiter, R.L., 1990, Inorganic Chemistry, Prinsciples of Structure and Reactivity, Fourth Edition, Harper Collins College Publishers. 5. 5. Miessler, G.L. & Tarr, D. A., 1991, Inorganic Chemistry, Prentice Hall International, Inc., London.
Notes:	*1 CU in learning process = three periods consist of: (a) scheduled instruction in a classroom or laboratory (50 minutes); (b) structured activity (60 minutes); and (c) individual activity (60 minutes) according to the Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 44 Year 2015 jo. The Regulation of Indonesia Ministry of Research, Technology, and Higher Education No. 50 Year 2018.
	**1 CU = 1,59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/Un38/Hk/Ak/2019